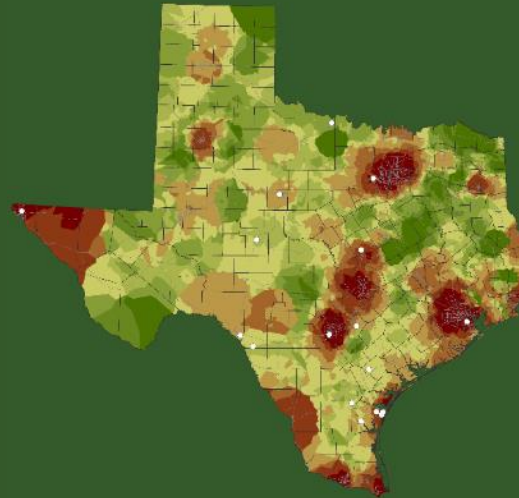


Military Encroachment & Wind Energy Study Update



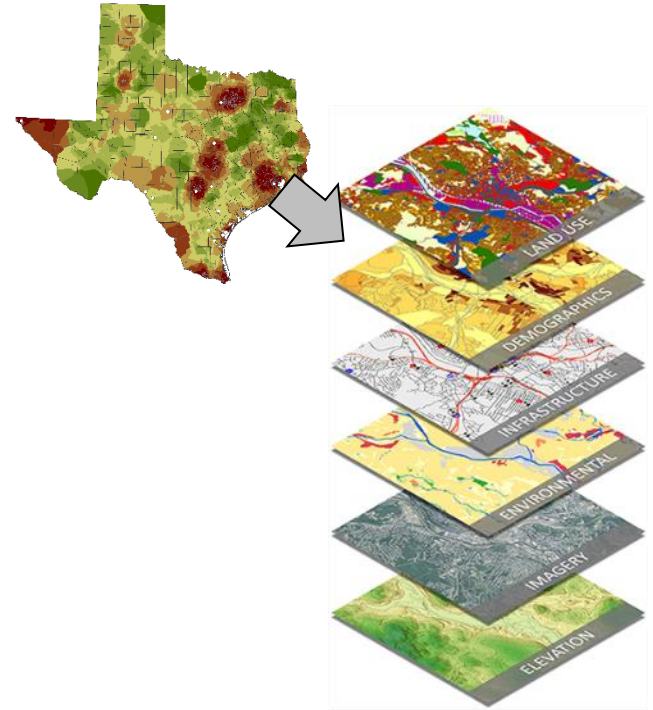
28 January 2019

Tony Parisi
Captain, CEC, USN (Retired)
Project Technical Lead



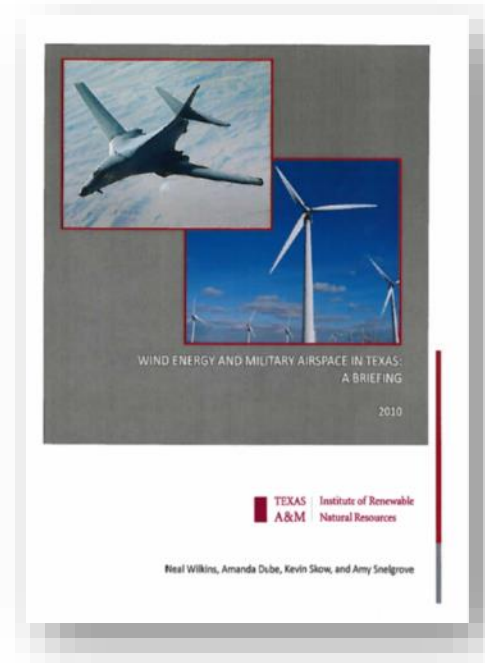
Agenda

- Background
- Project Description
- Efforts to Date
- Next Steps



Texas Mapping Assessment Project (TxMAP)

- Wind Energy and Military Airspace in Texas (2010 Report)
 - Data for siting wind energy development
 - Impacts to military in Texas
- TxMAP – update report + other encroachment threats
 - Gather geospatial Information, wind/energy focused
 - Develop web-based mapping portal for industry-military-community use
 - Facilitate partnerships & early engagement via “good map”



Project Goal

- Identify present and future incompatible land use activities that may limit the military's test and training mission, with an emphasis on wind energy development

Current Plan

- Develop/update tools that **facilitate early engagement** among industry, military and community stakeholders

**We are not identifying exclusion areas
or producing Red-Yellow-Green maps**

Efforts to Data

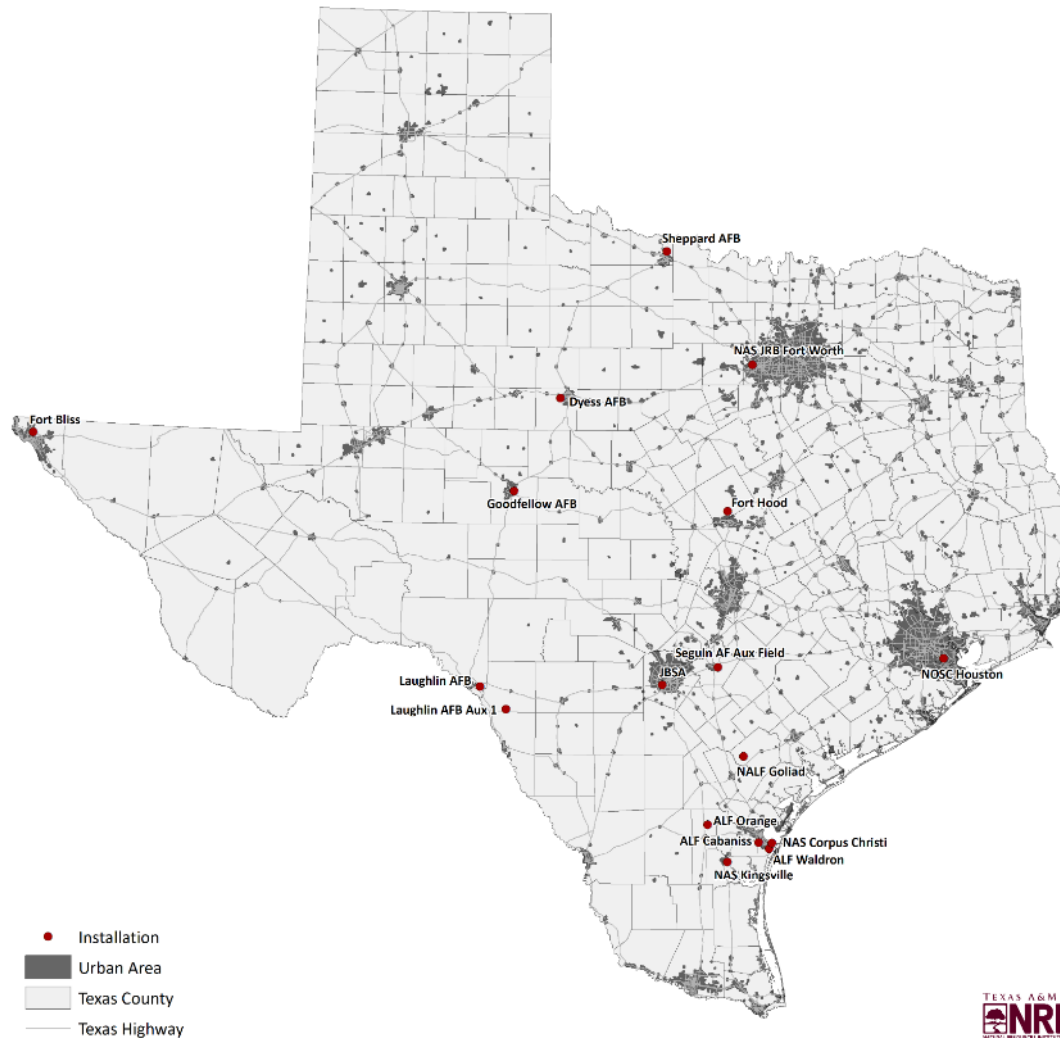
- Established Military Core Group
 - Representatives from cross section of military organizations
- Engaged stakeholders
 - NOV meeting with military representatives
 - NOV meeting with wind industry
 - JAN webinars with community stakeholders
- Acquired GIS & other data
- Received Recommendations on criteria to be used
 - More coming
- Developing web tool
- Preparing preliminary maps

Stakeholder engagement will continue

What Criteria Should be Used?

- Floors of Special Use Airspace & Military Training Routes?
 - $\leq 1,500$ ft AGL, $\leq 3,000$ ft AGL?
- Buffer around installations?
 - 25 nm, dependent on installation mission?
- Buffers around radars?
 - 25 nm, 40 nm, use line-of-sight?
- Existing restrictions on Military Training Routes?
- Other?
 - Drop Zones, Helicopter OPAREAS?

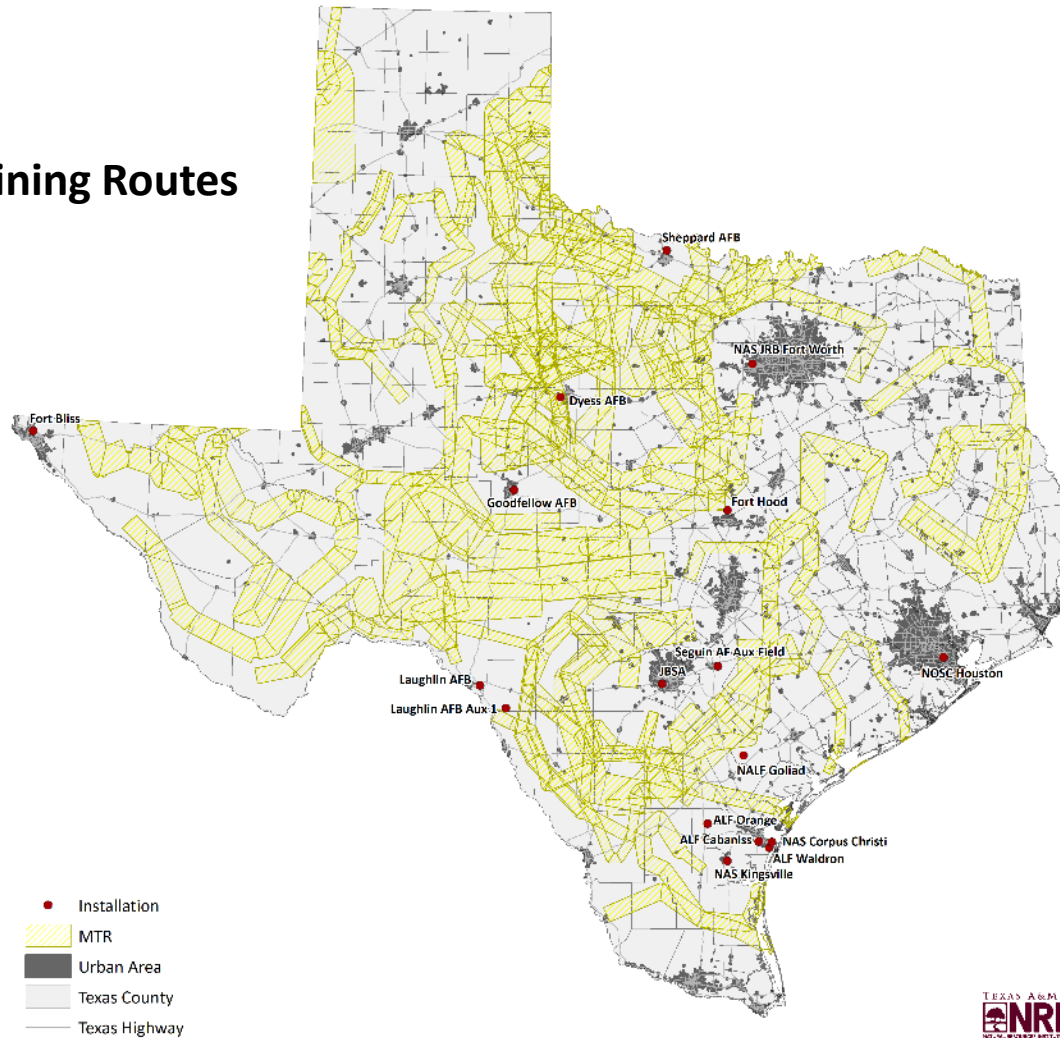
Military Installations



Notional Map

(For illustration purposes only)

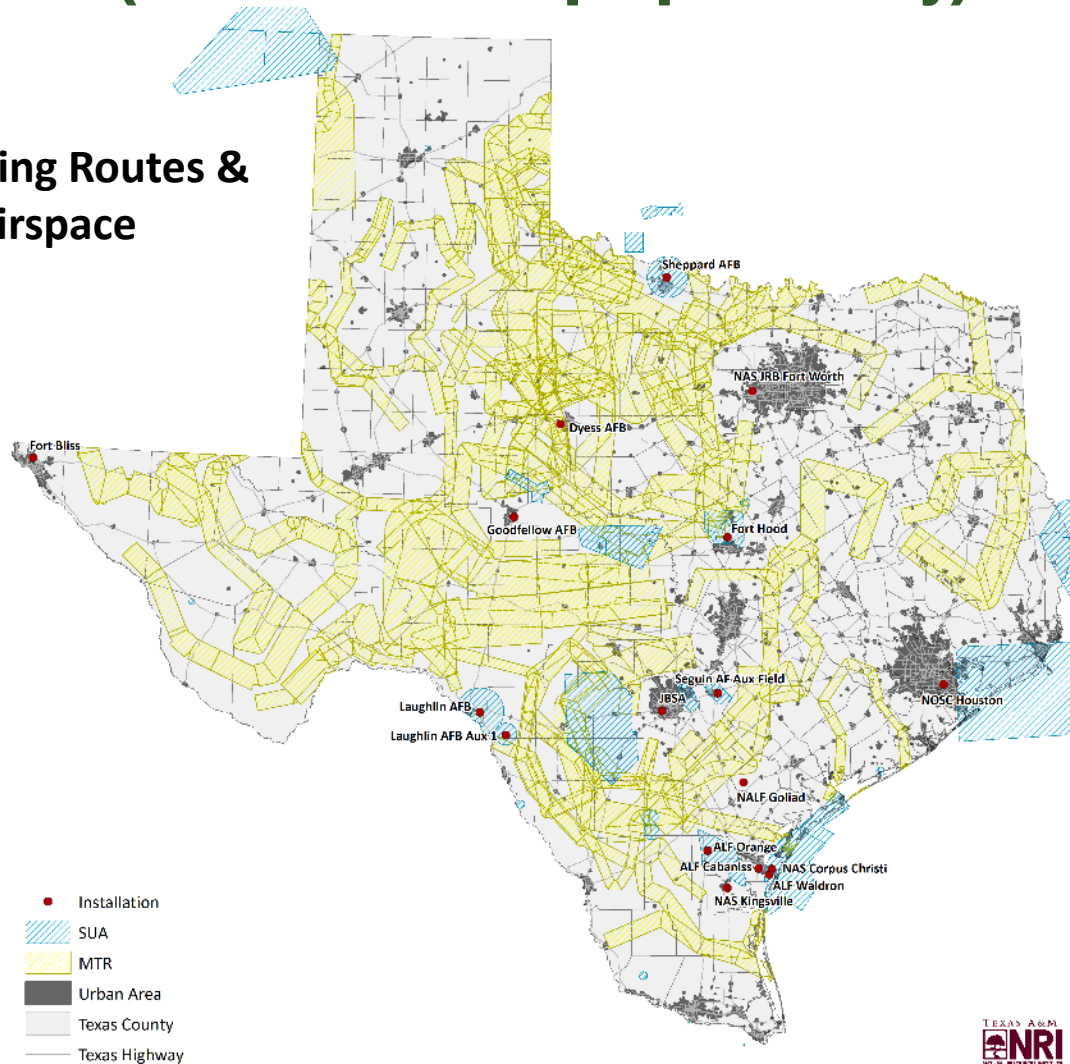
Military Training Routes



Notional Map

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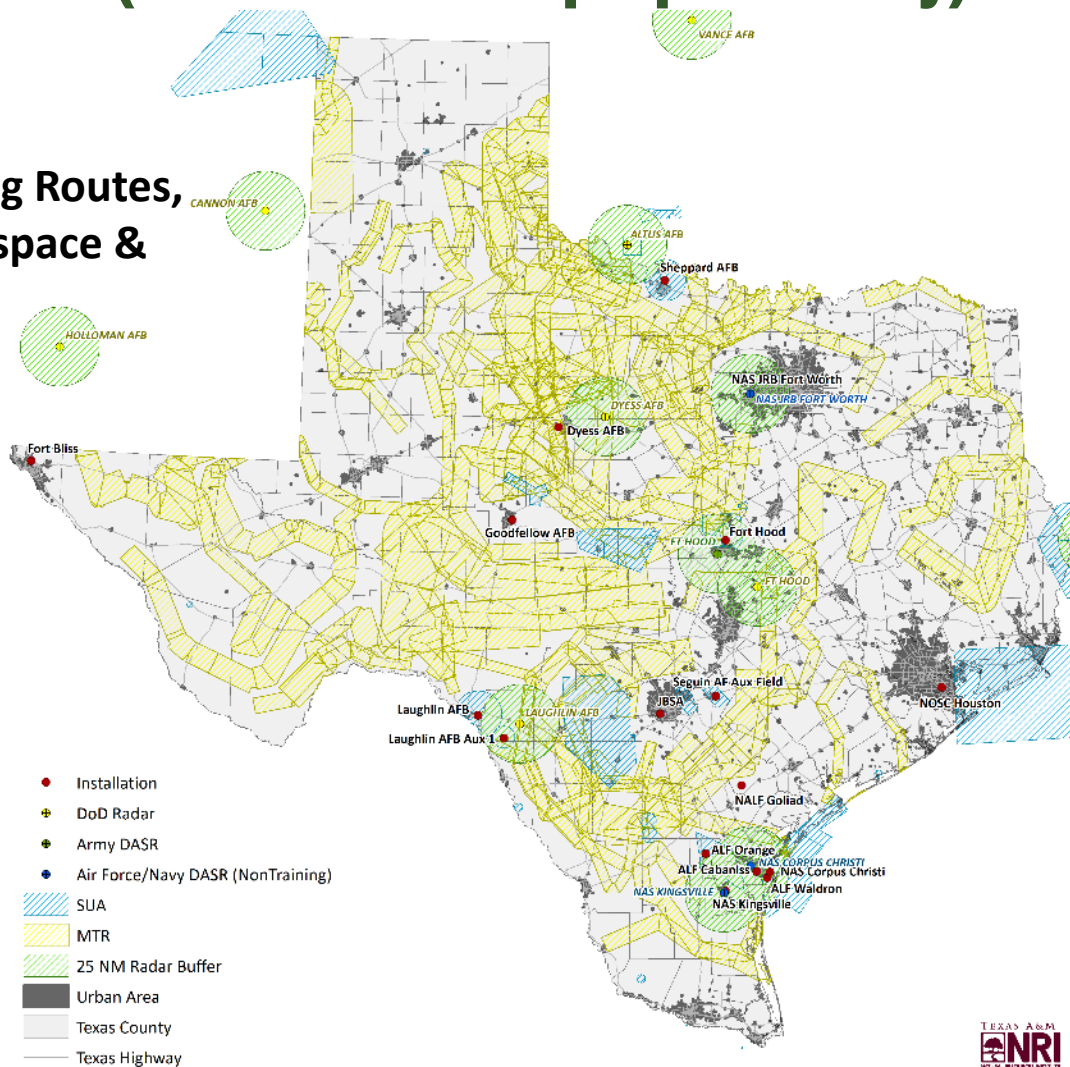
Military Training Routes & Special Use Airspace



Notional Map

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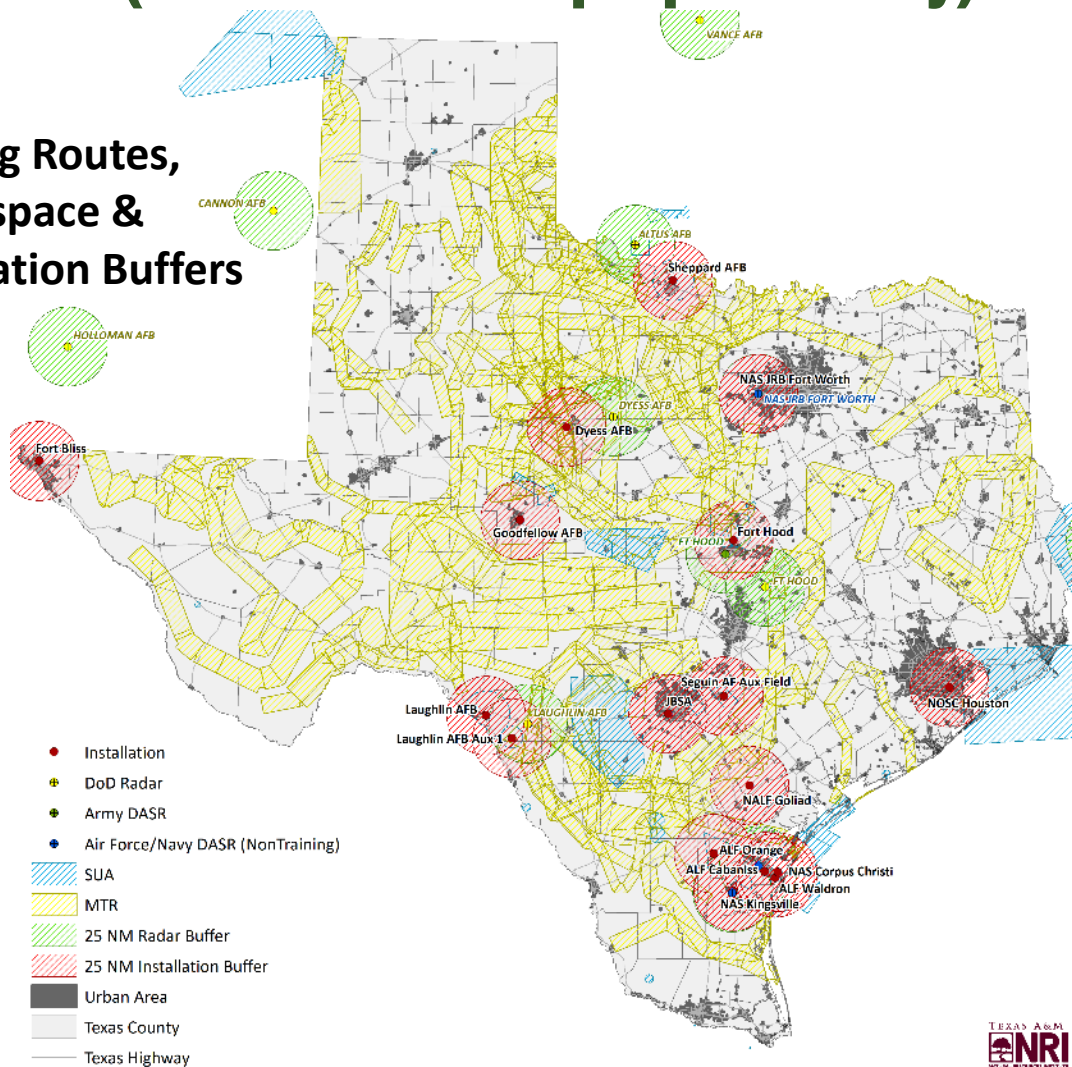
Military Training Routes, Special Use Airspace & Radar Buffers



Notional Map

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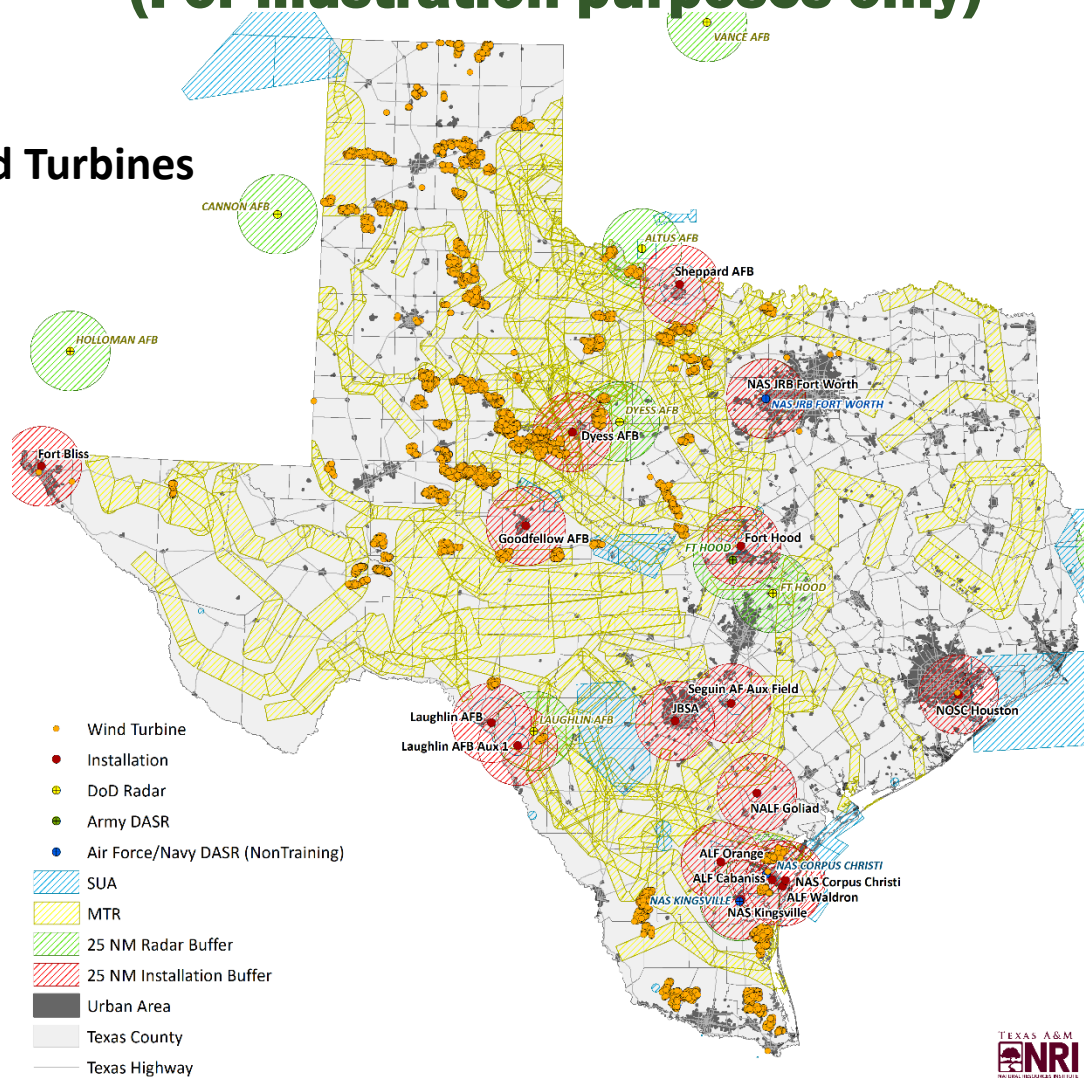
Military Training Routes, Special Use Airspace & Radar & Installation Buffers



Notional Map

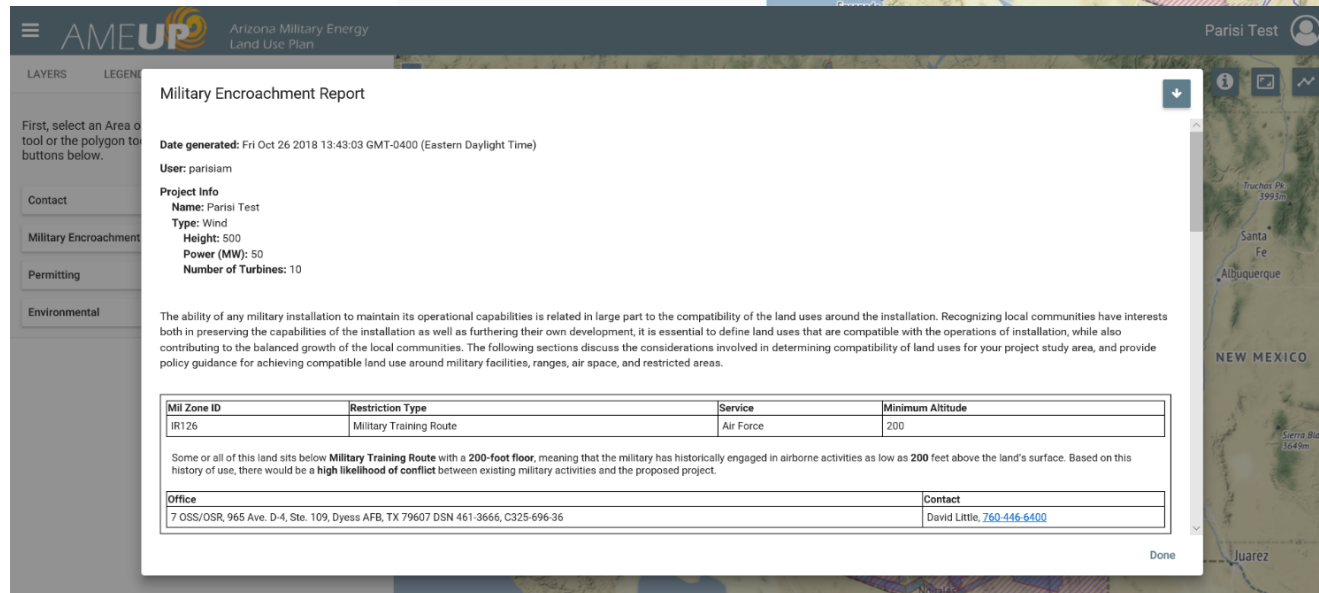
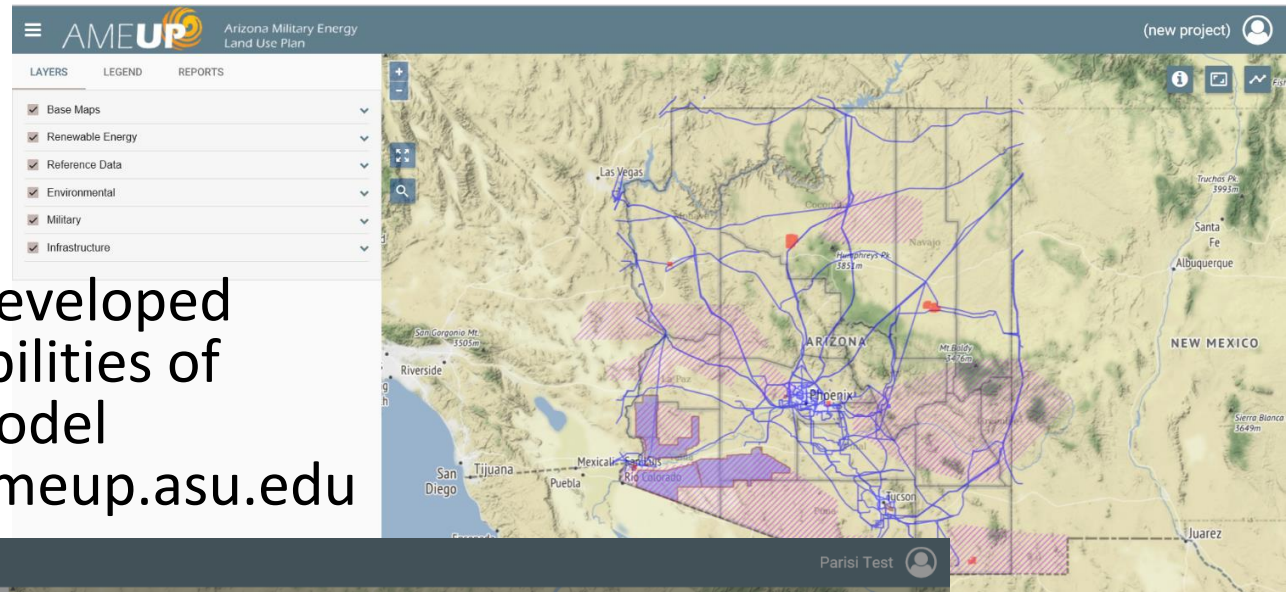
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Existing Wind Turbines



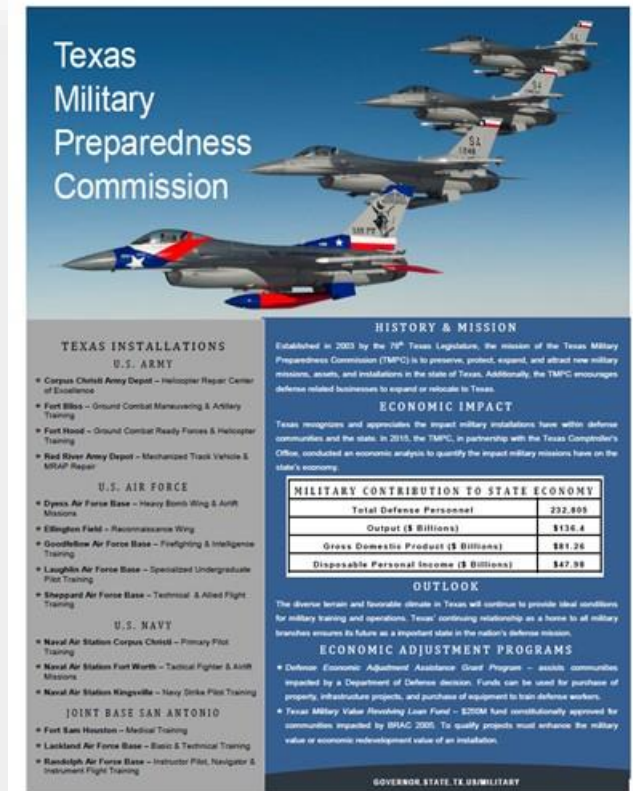
Web-based Mapping Portal

- Currently being developed
- Using some capabilities of Arizona tool as model
- <https://planner.ameup.asu.edu>



Use of “Good Map” for Collaborative Planning

- TxMAP data gathering and review will require coordination. Key aspect to the success of project...
 - Texas Military Commanders Council
 - Texas Military Preparedness Commission
 - Local Communities
 - Industry
 - Other Key Partners



Next Steps

Military Summit	Present project update/preliminary findings. Listening sessions for community stakeholders	JAN 28, 2019
Draft Wind Energy Report	Draft report for review and input. Address comments/concerns and submit for final review.	FEB 2019
Final Wind Energy Report	Complete and submit final report to include geospatial maps.	MAR 2019
Draft Web-based Mapping Portal	Draft web-based mapping service to interactively display content from Statewide Assessment. Integrate changes based on sponsor feedback.	MAR-OCT 2019
Draft Statewide Assessment Report	Draft report for initial review and input. Address comments/concerns and submit for final review.	MAR-OCT2019
Final Web-based Mapping Portal	Complete final changes to mapping portal. Maintain and update website as needed.	NOV 2019
Final State-wide Assessment Report	Complete and submit final report to include geospatial maps.	NOV 2019

*We Will Continue to Engage With All
Stakeholders Throughout The Process!*

<http://nri.tamu.edu/>

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